

FIG.2

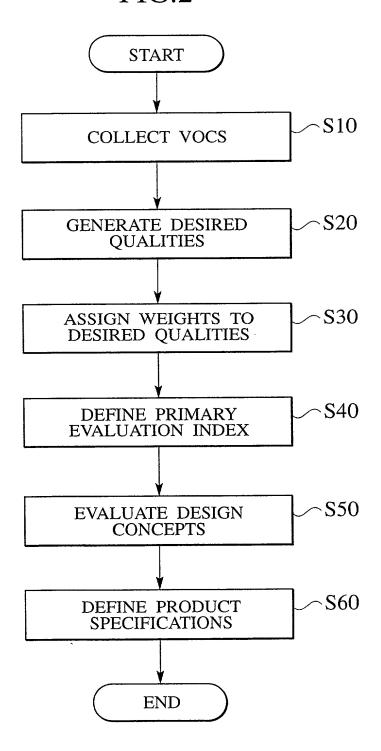
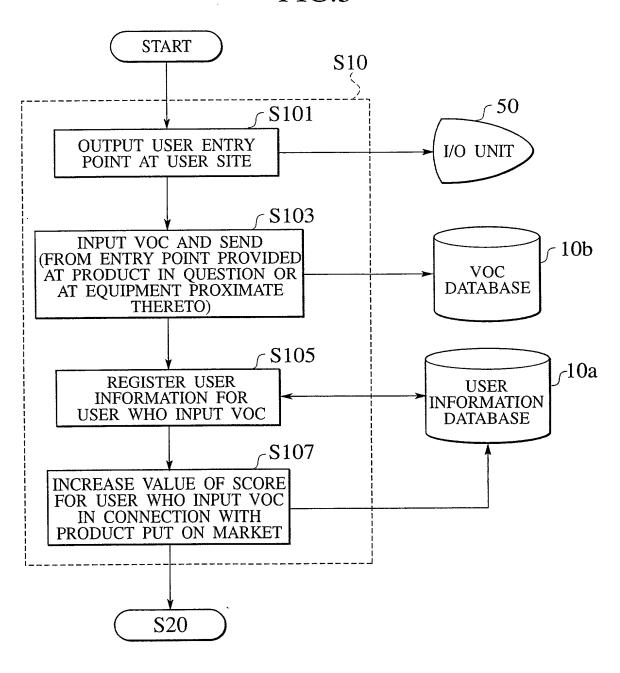
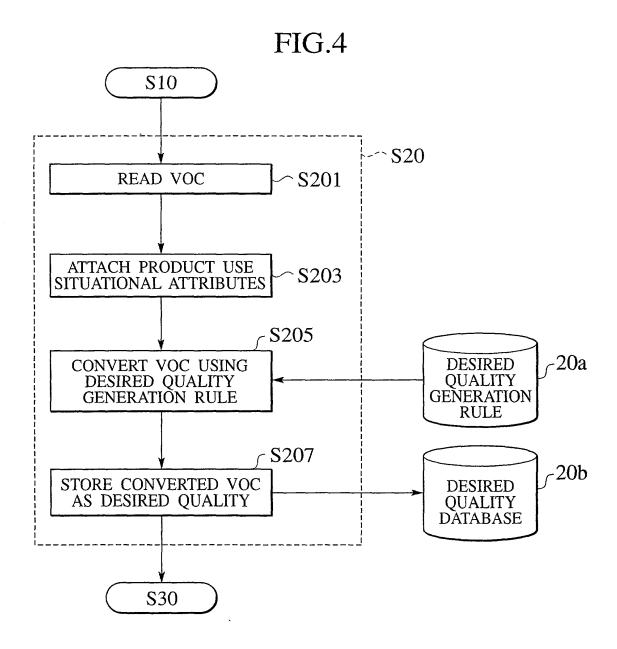


FIG.3





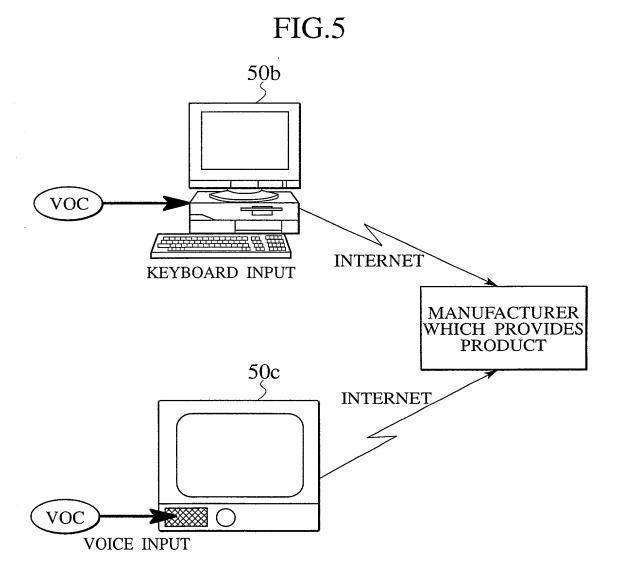
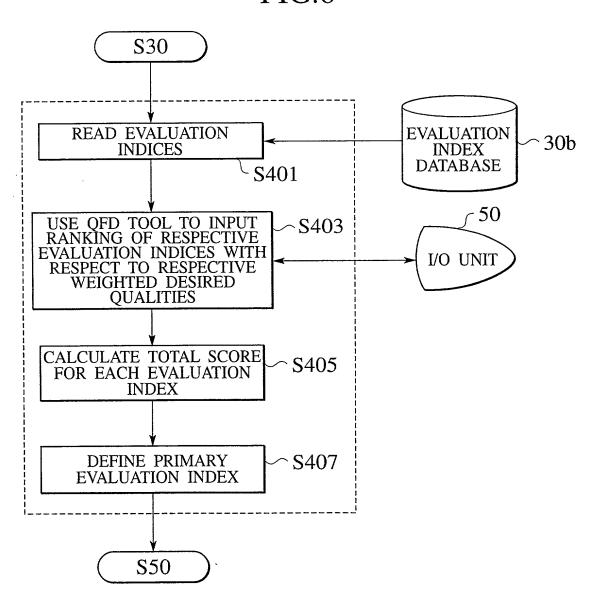
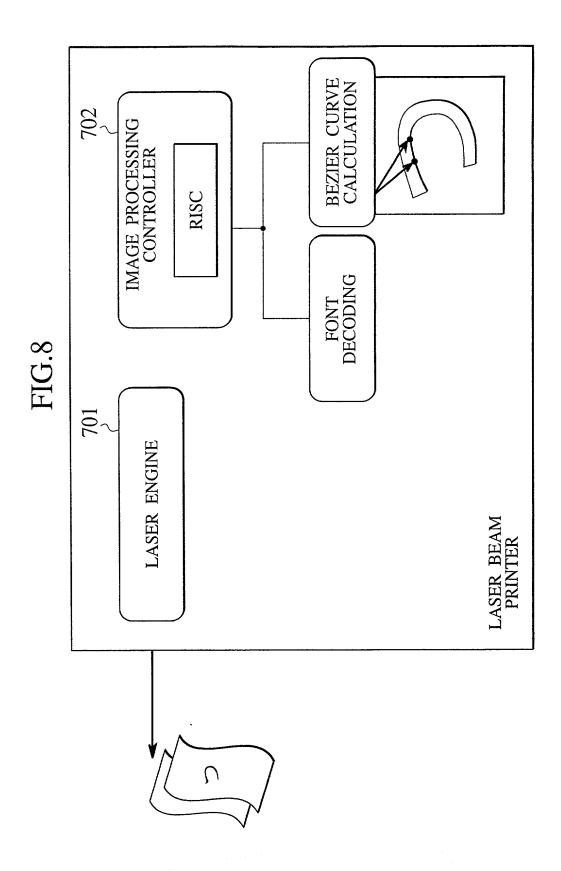


FIG.6



			,	, ,							
EVALUATION INDICES	Better	3 4 5	×	×	×	×	×	×			
EVALUINDI	Worse	1 2 3				^	^		×		
GRAPHIC DATA PROCESS	SING (dots/sec	)	3		6			3	3	107	0.26
INTERNAL PARALLEL DATE TRANSFER RATE (Mbyte/s				6	3					71	0.09 0.07 0.17 0.26
DMA DATA TRANSFER R	ATE (Mbyte/s	ec)		3		3				27	0.0
EXTERNAL PARALLEL D TRANSFER RATE (bps)	ATA			1		6				38	
INITIAL DEFECT RATE (p)	pm)						6			06	0.18 0.22
HIGH-PERFORMANCE RA	TING (units)							6		74	0.18
		WEIGHT	4.55	5.45	7.27	3.64	10.00	8.18	1.00	SCORE	NORMALIZED SCORE
FIG.7	DECIDED OITAL PPIEC		SOFTWARE DEVELOPMENT IS EASY	CAPABLE OF HIGH-SPEED DATA TRANSFER WITHIN SET	CAPABLE OF HIGH-SPEED IMAGE PROCESSING	CAPABLE OF HIGH-SPEED COMMUNICATION WITH SET EXTERIOR	CAN BE USED WITH CONFIDENCE	ALLOWS FOR EASY IMPROVEMENT OF FUNCTIONALITY IN FUTURE MODELS	CONSUMES LITTLE ELECTRICAL POWER		



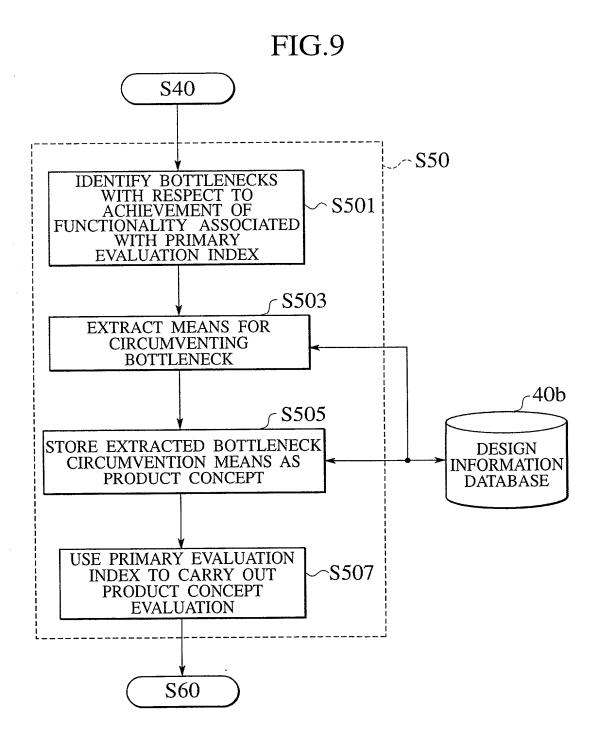


FIG.10A

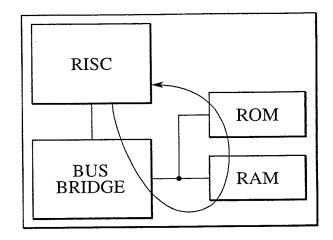


FIG.10B

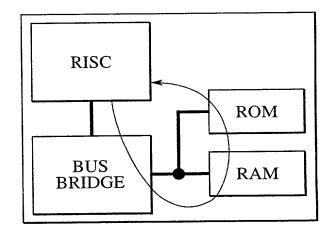
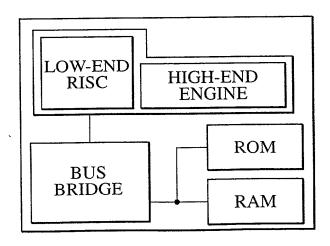
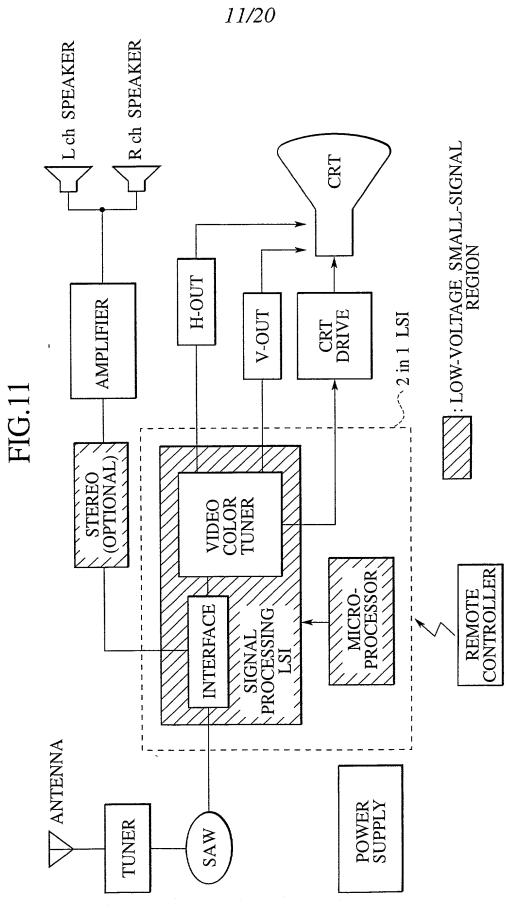
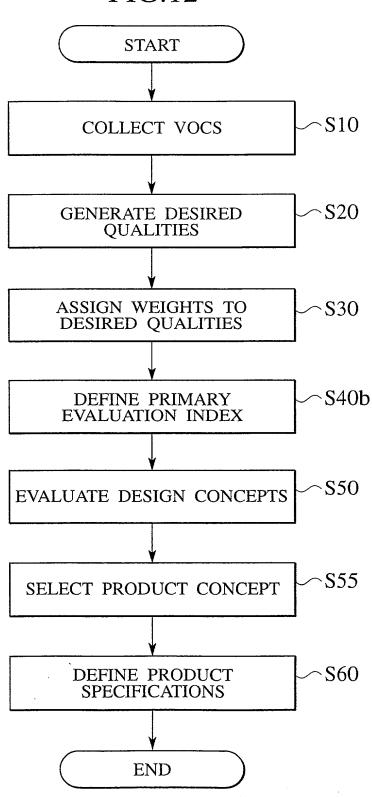


FIG.10C

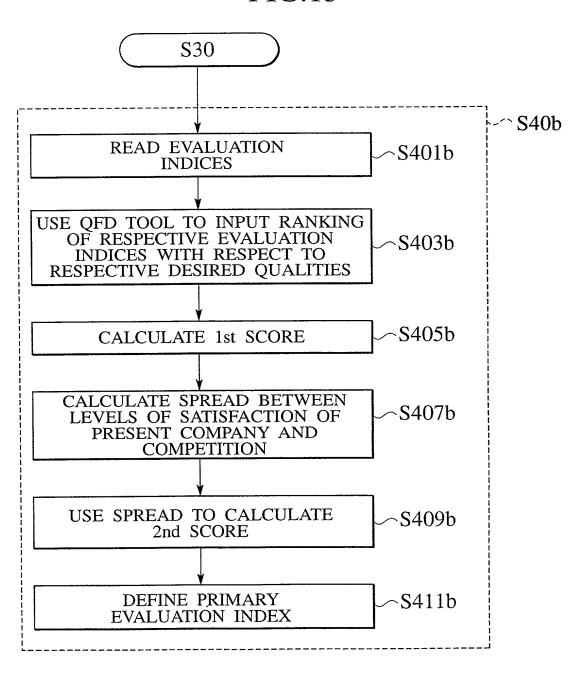




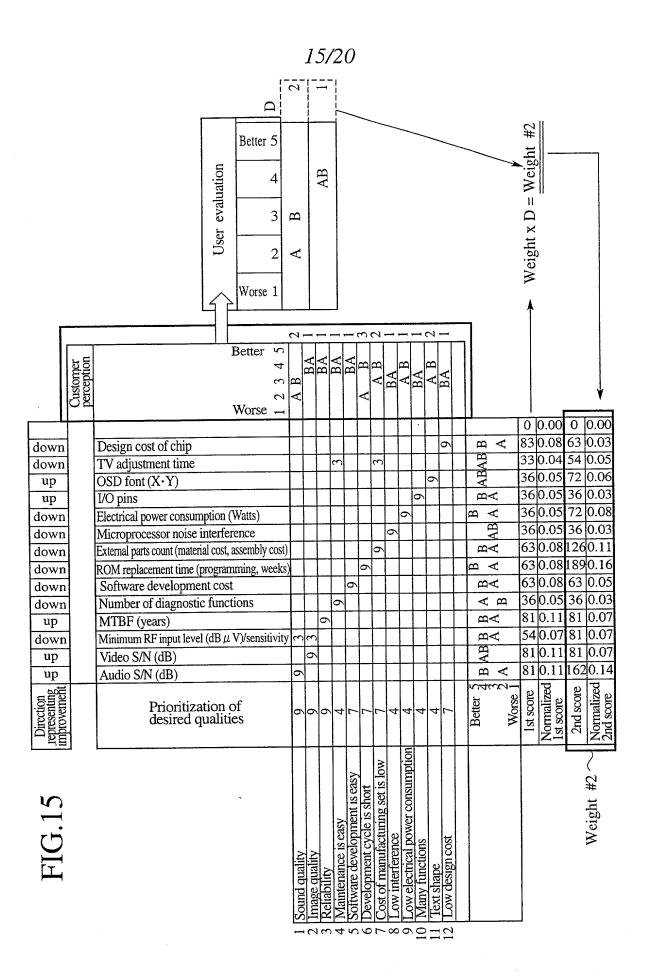
**FIG.12** 



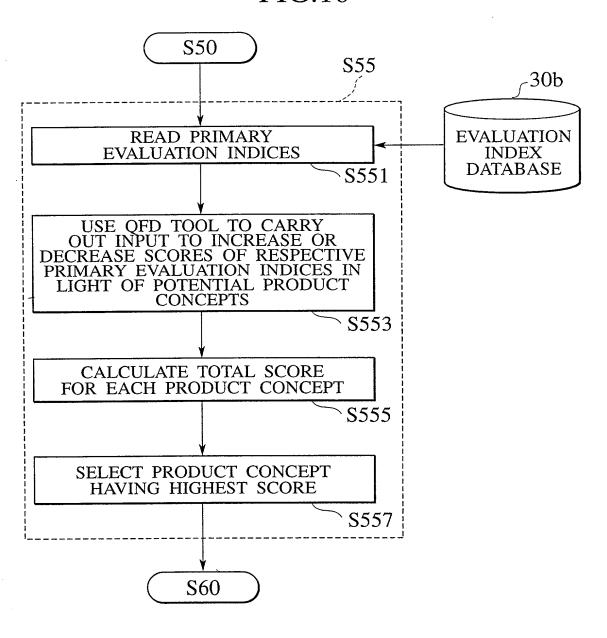
**FIG.13** 



	Evaluation indices indices	4/.	20												
	Design cost of chip			<u> </u>				3					6	57	0.05
	Design cost of set	T	<u> </u>					6						63	0.06
	TV adjustment time	Γ			6			3						84	0.08
	Electrical power consumption (Watts)									6				36	0.03
	OSD font (X • Y)											6		36	0.03
	I/O pins										6			36	0.03
	Memory capacity (kB)										6			36	0.03
	Microprocessor noise interference (dB)								6					30	0.03
İ	External parts count							6						63	0.06
	ROM replacement time (programming)					-	6							63	0.06
	Software development cost					6								63	0.06
	Diagnostic cost				m									21	0.02
	Minimum dielectric breakdown voltage (V)			6										81	0.08
	MTBF			6	_						_			81	<b>≫</b> .08
	Input sensitivity (dB μ V)	co	3	<b>1</b>										54	0.05
	Video frequency bandwidth (MHz)		$\omega$											27	0.03
	Video S/N (dB)		6											81	0.08
	Total harmonic distortion (%)	6												81	0.08
l	Audio S/N (dB)	6												81	0.08
	Prioritization of desired qualities	6	6	6	7	7	7	7	4	4	4	4	4	Score	Normalized score
	FIG.14	Sound quality	Image quality	Reliability	Maintenance is easy	Software development is easy	Development cycle is short	Cost of manufacturing set is low	Low interference	Low electrical power consumption	Many functions	Text shape	Low design cost		Weight of each index



**FIG.16** 



						-	17	7/2	20												1
Technological alternatives			C															+2) Positive (+ +)	+1) Fositive (0) Equivalent	-1) Negative (-2) Negative (++)	
nologic	Raw		162.0	81.0	81.0	81.0	36.0	63.0	189.0	126.0	36.0	72.	36.0	72.	54.0	63.0		•		> •	
Tech	built-in Sound trap, 1 excrystal & built-in SECA	xt, M		<b>&gt;</b>						•		>	•					324	306	18	
pa	built-in Sound trap, 2 excrystal & built-in SECA	М		•						•		<b>&gt;</b>	•					324	306	18	
select	built-in Sound trap, 1 e. crystal & ext, SECAM			▶						•		<b>&gt;</b>	0					288	306	-18	
Subconcept selected	4 ext, Sound trap, 1 excrystal & built-in SECA									•		<b>&gt;</b>	0					288	144	144	
ubcor	built-in Sound trap, 2 e crystal & ext, SECAM	xt,		<b>&gt;</b>						0		Δ	0					162	234	-72	Ī
S	4 ext, Sound trap, 1 ex crystal & built-in SECA									0		Δ	Δ					126	72	54	
pt	4 ext, Sound trap, 2 ex crystal & built-in SECA	t, M								0		$\nabla$	0					162	72	90	
Base concept	4 ext, Sound trap, 2 ex crystal 0, ext, SECAM of current 2 chl	1																0	0	0	
Ba	Direction representing improvement		<b>—</b>	<b></b>	<b>→</b>	<b>←</b>	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	$\rightarrow$	<b>→</b>	<b>←</b>	←	<b>→</b>	<b>→</b>					Ī
FIG.17	Primary evaluation indices	Primary evaluation indices	Audio S/N (dB)	Video S/N (dB)	Minimum RF input level (dB $\mu$ V)/sensitivity	MTBF (years)	Number of diagnostic functions	Software development cost	ROM replacement time (programming, weeks)	External parts count (material cost, assembly cost)	Microprocessor noise interference (dB)	Electrical power consumption (Watts)	I/O pins	OSD font (X·Y)	TV adjustment time	Design cost of chip		Total of all score-increasing factors	Total of all score-decreasing factors	Total adjusted score for concept	

